



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,470	04/18/2008	Jacques Bollekens	33264-US-PCT	7026

75074 7590 02/04/2011  
NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH, INC.  
220 MASSACHUSETTS AVENUE  
CAMBRIDGE, MA 02139

EXAMINER
----------

SAOUD, CHRISTINE J

ART UNIT	PAPER NUMBER
----------	--------------

1647

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

02/04/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NIBR.MAILDATA@NOVARTIS.COM  
PATRICIA.HOFSTETTER@NOVARTIS.COM

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,470	<b>Applicant(s)</b> BOLLEKENS ET AL.	
	<b>Examiner</b> Christine J. Saoud	<b>Art Unit</b> 1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 and 29-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/18/10</u>  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Applicant's amendment filed 18 November 2010 has been received and entered. Claims 18 and 29 have been amended. Claims 1-42 are currently pending.

Claims 1-17 and 29-42 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10 March 2010.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 18 November 2010 is in compliance with the provisions of 37 CFR 1.97 and has been considered by the examiner.

### ***Drawings***

The replacement drawing was received on 18 November 2010. This drawing is acceptable.

### ***Specification***

The disclosure is objected to because of the following informalities: the amendment filed 18 November 2010 to insert Sequence identifiers into the specification uses the incorrect format for referencing Sequence Identifiers. Applicant should refer to

Art Unit: 1647

38 CFR 1.821(d) which requires the format of "SEQ ID NO:" (note the use of a colon and not a period)..

Appropriate correction is required.

### ***Claim Objections***

Claims 19-28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 is directed to a method of manufacturing a medicament, but claims 19-28 are directed to use of a polypeptide, which does not further limit the subject matter of claim 18.

### ***Claim Rejections - 35 USC §§ 101 and 112***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 19-28 provides for the use of a polypeptide, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 19-28 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claims 19-28 are also rejected because claim 18 is directed to a method of making a medicament, but claims 19-28 are directed to "use of a polypeptide according to claim" 18, 21, 25 - there is insufficient antecedent basis for this limitation in claim 18.

### ***Response to Arguments***

At page 11 of the response, Applicant asserts that the amendment was discussed with the Examiner and that the amendment should avoid the rejection of record. Applicant's argument has been fully considered, but is not found persuasive. The amendment made in the instant application was only made to claim 18. Therefore, claims 19-28 are still written as "use" claims, and therefore, the rejection is maintained for these claims. The "use" claim rejection for claim 18 has been avoided because this claim has been amended, but as indicated in the interview, new grounds of rejection are necessitated by amendment.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by  
WO02/088358 (Bougueleret et al.).

Bougueleret et al. describe FGF-23 polypeptides which are encompassed by the disclosure, including FGF-23 with a particular amino acid sequence, molecules which have at least 95% amino acid sequence identity and fragments (see pages 3-5 of copy provided by Applicant). Pharmaceutical compositions are disclosed at page 9 of the reference and page 39 of the reference teaches methods of making pharmaceutical compositions. While Bougueleret et al. does not include the intended use in this disclosure of pharmaceutical compositions, intended use is not a material limitation on the composition or the method of making the composition, absent evidence to the contrary. Therefore, Bougueleret et al. anticipates the instant claim.

Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 7,223,563 (Econs et al.).

Econs et al. teach FGF-23 as well as mutants, variants and fragments thereof (column 2, lines 35-40) and pharmaceutical compositions thereof (column 3, lines 11-13). Econs et al. teaches that the FGF23 has a particular amino acid sequence (SEQ ID NO:2) or can have % identity to this sequence (see column 13, lines 50-65). Econs et al. also teaches biological fragments of FGF-23 (see column 14, lines 4-28). Econs et al. teaches methods of making a pharmaceutical composition (see columns 23-24). While Econs et al. does not include the intended use in this disclosure of pharmaceutical compositions, intended use is not a material limitation on the composition or the method of making the composition, absent evidence to the contrary. Therefore, Econs et al. anticipates the instant claim.

### ***Conclusion***

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1647

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine J. Saoud whose telephone number is 571-272-0891. The examiner can normally be reached on Monday-Friday, 6AM-2PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol can be reached on 571-272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christine J Saoud/



Application/Control Number: 10/578,470  
Art Unit: 1647

Page 8

Primary Examiner, Art Unit 1647